

Classifying Your Car**E3:A2**

In our previous activity, you classified stars based on their spectral lines. In this activity, you will explore different ways of classifying objects by attempting to classify all the cars in the world using two characteristics all cars share: horsepower of their engines and the weight of the car.

1. On a large graph in your classroom, label the vertical axis “horsepower” and the horizontal axis “weight of the car.”
2. Think about your own car, your family car, or the car of someone you know, and place a mark on the graph to indicate its relative horsepower and weight.



Figure 2-8: Photograph of a red toy racing car



Figure 2-9: Image of a red supergiant

After you make the graph as a class, examine it and answer the following questions:

1. In what region of the graph do most cars fall?
2. Sketch the class graph on a sheet of paper. Circle the regions of the graph that you believe should contain:
 - a) sports cars (Corvettes, Mustangs)
 - b) racing cars (Indy Cars)
 - c) luxury cars (Cadillacs, Lincolns)
3. Are there regions of the graph in which no cars appear? Why?

Common cars sold around the world and in the United States in 2017

1. Volkswagen Passat
2. Honda Accord
3. Mazda 3
4. Honda Jazz
5. Ford Fiesta
6. Volkswagen Jetta
7. Mercedes-Benz C class
8. Hyundai Tucson
9. Suzuki swift
10. Toyota Camry
11. Chevy Silverado
12. Ram Pickup
13. Ford Escape
14. Hyundai Elantra
15. Ford Focus
16. Toyota Rav4
17. Volkswagen Tiguan
18. Honda CR-V
19. Honda Civic
20. Volkswagen Golf
21. Nissan Rogue
22. Toyota Corolla
23. Ford F-Series Trucks
24. Toyota Prius
25. Nissan Altima
26. Ford Fusion
27. Ford Explorer
28. Chevrolet Equinox
29. Chevrolet Malibu
30. Nissan Sentra
31. Jeep Grand Cherokee
32. Telsa Model S, Model X, Model 3